REMARKS

Comments of the applicant are preceded by related comments of the examiner in small bold type.

> **3. Claims 1, 2-4, 5, 6-8, 9-1 2, 26, 28-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Patel et al. (U.S.Patent No. 6,865,185 61) in view of Tiedemann et al. (U.S.Patent No. 6,567,420 61).**
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> ...
>
> **However, Patel et al. is silent disclosing controlling an order in which the outbound packets are transmitted to the recipients based on rates of transmission of the outbound packets.**
>
> **Tiedemann, Jr. et al. discloses controlling an order in which the outbound packets are transmitted to the recipients based on rates of transmission of the outbound packets (see col. 4, lines 61-63, the remote unit retrieves the set point information from the overhead channel and uses it to determine the rate at which it transmits).**

In claims 1 and 26, the order in which outbound packets are transmitted is based on "the forward link transmission rate ..." The examiner correctly notes that Patel does not describe and would not have made obvious this feature and relies on Tiedemann as disclosing it. However, Tiedemann provides no disclosure of ordering packet transmission at all, much less based on forward link transmission rates. Rather, Tiedemann is concerned with controlling the rate at which remote units transmit packets on the reverse link:

> A base station is used to control the ***reverse link transmission rates for remote units*** within the corresponding coverage area. The base station monitors the reverse link loading and dynamically adjusts the transmission rate set point. The transmission rate set point may be defined in terms of a maximum transmission rate and a transmission probability. The maximum transmission rate defines the maximum reverse link data rate available to the remote units. The transmission probability is used to control the probability that a remote unit transmits at the given maximum transmission rate. The base station may broadcast the transmission rate set point to the remote units. The remote units may transmit at a rate lower than the maximum transmission rate at any time. (col. 3, lines 41-54).

Neither Patel nor Tiedemann describes nor would have made obvious "controlling an ***order*** in which the outbound packets are transmitted to the recipients based on the ***forward link***

transmission rate and the service class associated with each of the received data packets corresponding to the outbound packets," as recited in claims 1 and 26.

The dependent claims are patentable for at least the same reasons given with respect to the independent claims from which they depend.

28. Claims 27, 30-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Patel et al. (U.S.Patent No. 6,865,185 Bl) in view of Bonomi et al. (U.S.Patent No. 6,069,872).

In the claim 27, Patel et al. discloses inserting labels or tags in front of each data packet indicating the FEC which is based on the commonability of flow characteristics. Such labels or tags enable the enforcement of QoS treatments (see col. 3, lines 62-65); The system for queuing traffic in a wireless network includes receiving a stream of packets for transmission in the wireless network..... Each packet is queued in an assigned virtual group for transmission in the wireless network (see abstract); comprising:

Receiving data packets at a communication node; associating each of the received data packets with one of a set of different service classes; transmitting packets corresponding to the received packets to recipients based on the service class associated with each of the received data packets corresponding to the outbound packets (see col. 3, lines 62-65, abstract).

Controlling the order in which packets are transmitted based on the transmission rate (Guaranteed Rate) and the service class (QoS Class) of the packets (see col. 1 , lines 42-43);

Scheduling packet for transmission among distinct classes based on the receiving values (rates or bandwidths).

However, Patel et al. is silent to disclosing receiving from a network operator values representing minimum average forwarding rate percentage for each of more than one distinct classes of service associated with transmission of packets from a radio node of a network to recipients.

Bonomi et al. discloses receiving from a network operator values representing minimum average forwarding rate percentage for each of more than one distinct classes of service associated with transmission of packets from a radio node of a network to recipients (see col. 9, lines 10-13, the scheduler can guarantee a minimum percentage of bandwidth to different traffic class).

Both Patel, and Bonomi disclose to minimize congestion within the communication network. Bonomi recognizes receiving from a network operator values representing minimum average forwarding rate percentage for each of more than one distinct classes of service associated with transmission of packets from a radio node of a network to recipients. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Patel with the teaching of Bonomi to represent minimum average forwarding rate percentage for each of more than one distinct classes of service associated with transmission of packets from a radio node of a network to recipients in order to minimize congestion within the communications network.

In claim 27, packets are scheduled for transmission "based on a quality of an air-link channel that serves the recipient when the packet is to be transmitted and the minimum forwarding performance for each of the classes."

In Bonomi, a switch of an asynchronous transfer mode (ATM) network controls congestion by controlling the transmission rate of each of a number of source nodes connected by respective virtual channels to the switch. (col. 3, lines 20-41). The switch uses a resource management cell to send information back to each source node to control its bit rate. (col. 6, lines 20-22). Although Bonomi contemplates guaranteeing a minimum percentage of bandwidth to different classes of traffic associated with packets being transmitted by the source node (col. 9, lines 10-13), Bonomi does not describe and would not have made obvious scheduling packet transmission "***based on a quality of an air-link channel*** that serves the recipient when the packet is to be transmitted and the minimum forwarding performance for each of the classes," as recited in claim 27.

The dependent claims are patentable for at least the same reasons given with respect to the independent claims from which they depend.

It is believed that all of the pending claims have been addressed. However, the absence of a reply to a specific rejection, issue or comment does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.Enclosed is a $225.00 check for the Petition for Extension of Time fee. Please apply any other charges or credits to deposit account 06-1050.

Respectfully submitted,

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